

NEW SYNONYMY IN CARIBBEAN ANTS OF THE GENUS  
*LEPTOTHORAX* (HYMENOPTERA: FORMICIDAE)

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*Abstract.*—The neotropical genus *Macromischa* is formally recognized as a synonym of *Leptothorax*. The following new species-group synonymy is proposed. *Leptothorax isabellae* (Wheeler) [= *Macromischa isabellae* var. *muticus* M. Smith = *L. (Macromischa) hyperisabellae* Baroni Urbani]; *L. laeta* (Wheeler) [= *M. affinis* Mayr, preoccupied, = *L. (M.) similis* Baroni Urbani]; *L. villarensis* (Aguayo) [= *M. manni* wheeler, preoccupied, = *L. (M.) williami* Baroni Urbani].

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*Macromischa* was originally described as a genus allied to *Leptothorax* Mayr, 1855, by Roger, 1863. Mann (1920) divided *Macromischa* into three subgenera when he proposed two new subgenera, *Croesomyrmex* and *Antillaemyrmex*. Although "typical" *Macromischa* are very distinctive ants with a unique habitus, there are several species in Central America and northern South America, mostly undescribed, that effectively bridge the gap between *Macromischa* and the genus *Leptothorax*. Baroni Urbani (1978) correctly recognized the problem when he proposed to reduce *Macromischa* to subgeneric status. More recently, Bolton (1982) expressed the opinion that "... *Macromischa* is best regarded as a synonym of *Leptothorax*," but did not formally synonymize it. Therefore, I formally propose to treat *Macromischa*, and its included synonyms *Croesomyrmex* and *Antillaemyrmex*, as a synonym of *Leptothorax* (NEW SYNONYMY).

The transfer of *Macromischa* to *Leptothorax*, as proposed by Baroni Urbani, had the predictable result that a number of names were preoccupied. For those that were not synonyms, Baroni Urbani proposed new names. There are two instances, however, in which he erred by proposing new names for which there were earlier names available. These two cases are corrected below.

*Leptothorax laetus* (Wheeler)

*Macromischa affinis* Mann, 1920: 417; ♀. Preoccupied in *Leptothorax* by *L. affinis* Mayr, 1855: 442.

*Macromischa affinis* subsp. *laeta* Wheeler, 1937: 456; ♀.

*Macromischa affinis* subsp. *moerens* Wheeler, 1937: 456; ♀.

*Leptothorax (Macromischa) similis* Baroni Urbani, 1978: 501. Unnecessarily proposed to replace *L. affinis* (Mann, 1920). NEW SYNONYMY.

Discussion.—Both of the names proposed by Wheeler are available and either may be used. Since *M. laeta* was the first described, I have chosen to use that

name. I have examined cotypes of all three nominate forms and agree with Baroni Urbani that they are conspecific.

***Leptothorax villarensis* (Aguayo)**

*Macromischa manni* Wheeler, 1931: 19; ♀. Preoccupied in *Leptothorax* by *L. manni* Wheeler, 1914.

*Macromischa manni* var. *villarensis* Aguayo, 1931: 177; ♀.

*Leptothorax (Macromischa) williami* Baroni Urbani, 1978: 530. Unnecessarily proposed to replace *L. manni* (Wheeler, 1931). NEW SYNONYMY.

Discussion.—Since Aguayo's name is available as the oldest valid name for this species, the replacement name proposed by Baroni Urbani is unnecessary.

***Leptothorax isabellae* (Wheeler)**

*Macromischa isabellae* Wheeler, 1908: 138; ♀, ♀, ♂.

*Macromischa isabellae* subsp. *mutica* M. Smith, 1937: 747; ♀ NEW SYNONYMY.

*Leptothorax (Macromischa) hyperisabellae* Baroni Urbani, 1978: 453–454; ♀ NEW SYNONYMY.

*Leptothorax (Macromischa) isabellae*: Baroni Urbani, 1978: 456–459; ♀, ♀, ♂.

*Leptothorax (Macromischa) muticus*: Baroni Urbani, 1978: 464–465; ♀.

Discussion.—This ant is generally distributed throughout forested areas of Puerto Rico. Workers of the nominate form originally described by Wheeler possess short propodeal spines. The form described by Smith was characterized by the lack of propodeal spines and subtle differences in the form of the head and thorax, and the weakly developed ventral petiolar process. Baroni Urbani's *L. hyperisabellae* is based on a single worker with unusually long propodeal spines.

Among the numerous specimens available to me is a nest series collected at Maricao, the type locality of subsp. *mutica*. Most specimens possess distinct spines, some have short denticles, and some are unarmed. The other characteristics cited by Smith are equally unsupportable and I consider subsp. *mutica* a synonym of *L. isabellae*, not a valid species as supposed by Baroni Urbani.

Another nest series, from El Yunque, the type locality of *L. hyperisabellae*, consists exclusively of workers with propodeal spines. In some, the spines are very short and denticle-like; in others they are conspicuously longer and, although none have spines as long as illustrated for *L. hyperisabellae*, are very similar to *L. hyperisabellae*. The difference is a small one of degree only and I attach no significance to it.

It should be noted that Baroni Urbani's figures of the thoraces show conspicuous differences in shapes, especially in dorsal view. The worker caste of *L. isabellae* is unusually variable because there is a pronounced tendency toward pseudogynes. Many workers possess ocelli and at least some suggestion of female-like thoracic sutures. Humeral angles may be sharp or wholly lacking. Therefore, caution is advised when considering thoracic shape in *L. isabellae*.

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## LITERATURE CITED

- Aguayo, C. G. 1931. New ants of the genus *Macromischa*. Psyche 38: 175-183.
- Baroni Urbani, C. 1978. Materiali per una revisione die *Leptothorax* neotropicali appartenenti al sottogenere *Macromischa* Roger, n. comb. (Hymenoptera: Formicidae). Entomol. Basiliensia 3: 395-618.
- Bolton, B. 1982. Afrotropical species of the myrmicine ant genera *Cardiocondyla*, *Leptothorax*, *Melissotarsus*, *Messor* and *Cataulacus* (Formicidae). Bull. Br. Mus. (Nat. Hist.) Entomol. Ser. 45: 307-370.
- Mann, W. M. 1920. Additions to the ant fauna of the West Indies and Central America. Bull. Am. Mus. Nat. Hist. 42: 403-439.
- Mayr, G. 1855. Formicina austriaca. Beschreibung der bisher im oesterreichischen Kaiserstaate aufgefundenen Ameisen, nebst Hinzufuegung jener in Deutschland, in der Schweiz und in Italien vorkommenden Arten. Verh. Zool.-Bot. Ges. Wien 5: 273-478.
- Roger, J. 1863. Die nue aufgefuehrten Gattungen and Arten meines Formicidenverzeichnisses, nebst Ergaenzunge einiger fruher gegebenen Beschreibungen. Berlin. Entomol. Z. 7: 131-214.
- Smith, M. R. 1937. The ants of Puerto Rico. J. Agric. Univ. P. R. 20: 819-875.
- Wheeler, W. M. 1908. The ants of Porto Rico and the Virgin Islands. Bull. Am. Mus. Nat. Hist. 24: 117-158.
- . 1914. Ants collected by Mr. W. M. Mann in the State of Hidalgo, Mexico. N.Y. Entomol. Soc. 22: 37-61.
- . 1931. New and little known ants of the genera *Macromischa*, *Croesomyrmex* and *Antillae-myrmex*. Bull. Mus. Comp. Zool. 72: 3-34.
- . 1937. Ants mostly from the mountains of Cuba. Bull. Mus. Comp. Zool. 81: 441-465.